COVAD
COMMUNICATIONS COMPANY

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Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th Street, SW
Room TWD 204
Washington, DC 20554

July 22, 1999

Re: CC Docket No. 98-147

Dear Ms Roman Salas,

Enclosed please find an original and four (4) copies of Covad Communications Company in the above-referenced proceeding.

Please date-stamp a copy and return to the courier.

If you have any questions, please don't hesitate to call.

Sincerely,

Thomas M. Koutsky /mch

Thomas M. Koutsky

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Deployment of Wireline Service Offering	)	CC Docket No. 98-147
Advanced Telecommunications Capability	)	
	)	

REPLY COMMENTS OF COVAD COMMUNICATIONS COMPANY

The Comments filed by parties in response to the *Further Notice of Proposed Rulemaking* in the above-captioned proceeding[1] demonstrate – without a doubt – that DSL line sharing is technically and operationally feasible in all respects and that the availability of DSL line sharing would vastly promote the deployment of advanced, broadband services to millions of homes and businesses nationwide. In addition, commenting parties have provided a comprehensive record to assist the Commission in developing and implementing a "final" loop spectrum management policy that would not discriminate between xDSL services.

I. THE RECORD DEMONSTRATES THE DSL LINE SHARING IS FEASIBLE IN ALL RESPECTS AND WOULD PROMOTE BROADBAND DEPLOYMENT

Covad was joined by several other commenters in arguing that DSL line sharing is technically and operationally feasible.[2] Indeed, the comments demonstrate that DSL line sharing

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1 Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147 (rel. Mar. 31, 1999)*("Advanced Services Order"* and *"FNPRM"* or *"Further Notice").*

2 *See, e.g.*, @link Networks at 5-7; CIX at 8-9; Covad at 7-14; GSA at 5-8; Inline at 1; Intermedia at 1-4; MCI WorldCom at 12; NAS at 6-8; Primary Network at 6; Nortel at 3, 9; NorthPoint at 18-22; Oklahoma Corp. Cssn. at 14-20; Sprint at 9-11; NEXTLINK at 9-10.

would provide a near-immediate broadband DSL choice to literally millions of Americans homes and small businesses. On the other hand, many of the operational issues raised by incumbent LECs opposing in this proceeding amount to little more than the childish whines of carriers that simply "don't want to do it" because it might be "complicated."[3]

Indeed, Covad and other commenters clearly showed in this proceeding that the operational issues presented by DSL line sharing are not overly complicated (and indeed pale in comparison to the operational issues presented by line-sharing between local and long distance services). These temporary and transitory issues are worth addressing, given the public interest benefits of increased broadband deployment to residential and small business consumers.

DSL Line Sharing will Promote Broadband Deployment to Residential and Rural Areas. Many parties emphasized that DSL line sharing would promote the availability of broadband services in residential and rural areas. For example –

- The Oklahoma Corporation Commission stated successful implementation of DSL line sharing "should allow fuller use of the available bandwidth in the local loop that exists today without unnecessary multiplication of local lines and the associated costs"[4] and that DSL line sharing will "further promote the efficient and expedited deployment of advanced telecommunications technologies."[5]

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3 *See, e.g.,* Bell Atlantic, Crandall Dec. at 4, 10-11 (line sharing would complicate cost allocation process); Bell Atlantic, Jackson Dec. at 8-11 (customers would be harmed because ILEC and data CLEC would argue with one another); BellSouth at 16 (implementing line sharing would cost too much); SBC at 19 (arguing that it has exclusive right "to decide what to do with [its] loops"); *but see* Sprint at 8 (Sprint, one of the nation's largest incumbent LECs, reverses prior position in this proceeding and now supports DSL line sharing).

4 OCC at 18. The Oklahoma Commission's comments dovetail with Covad's argument that line sharing may be the *only* means in which a significant portion of consumers may be denied a competitive DSL service because of the unavailability of a "stand-alone"

- Covad argued that DSL line sharing would result in the massive collocation of DSLAMs and packet switches in residential and rural areas. These DSL-equipped last miles will encourage ILECs and CLECs alike to deploy additional fiber facilities into these residential and rural wire centers.[6] Therefore, rather than providing a dis-incentive for advanced services deployment, the proliferation of mass-market DSL services will cause *even more* such investment.
- @Link Networks – which deploys xDSL services in dozens of small to mid-sized markets – stated that without DSL line sharing, competitive entry into many markets would not be possible.[7]
- NorthPoint argued that "[l]ine sharing is *sine qua non* for residential DSL competition," and that without line sharing, "millions of residential users who could immediately benefit from competitive DSL will be denied it."[8]
- Rhythms pointed out that although DSL technology has been available for years, ILECs have only begun to deploy DSL services in response to *competition*.[9]

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loop to the homes of those consumers. Covad Comments at 28-29; *see also* NAS at 6 (line sharing will lead to more efficient use of existing loops); NorthPoint at 15 ("Line sharing increases the pool of consumer alternatives for DSL and voice services but eliminated none.").

5 OCC at 20.

6 Covad at 41-42.

7 @Link Networks at 2-4.

8 NorthPoint at 1, 3.

9 Rhythms at 7; *accord* Lee L. Selwyn, Patricia D. Kravtin & Scott A. Coleman, *Building a Broadband America: The Competitive Keys to the Future of the Internet* (Economics and Technology, Inc. May 1999) at 56-58.

The Commission has Jurisdiction to Mandate DSL Line Sharing. In its opening comments, Covad argued that the Commission has two separate and independent bases for ordering DSL line sharing – as an unbundled network element pursuant to Section 251(c)(3) and as an interstate access service pursuant to Sections 201 and 202 of the Act. Other parties agreed with this analysis.[10]

No incumbent LEC presented any argument that DSL line sharing could *not* be ordered by the Commission as an interstate access service. This is because no such argument holds water. First, ILECs cannot object to Commission jurisdiction because they have tariffed their ADSL services as interestate special access services. Second, Commission precedent under the *Expanded Interconnection* proceeding is consistent with the principle that ILECs must not unreasonably prevent purchasers of interstate special access services from interconnecting with those services at a feasible point of interconnection. In the end, ILECs cannot dispute that it is clearly feasible to interconnect with the ILEC's DSL special access service at the central office before the traffic hits the ILEC's DSLAM, by use of a POTS Splitter. Applying these principles, the Commission is compelled under Sections 201(b) and 202(a) to order incumbent LECs to tariff DSL line sharing as a "DSL Loop Transport Service" – a service in which the CLEC would be able to provide DSL services over frequencies greater than 4 kHz on the loop (so as to avoid interference with the analog band) by using its own collocated DSLAM and interoffice network.

Covad also believes that DSL line sharing may be ordered as an unbundled network element. In fact, just as the Commission has maintained its *Expanded Interconnection*

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10 NAS at 9-14 (authority both as UNE and access service); Intermedia at 3-4 (authority to order as UNE); @link Networks at 5-7; NorthPoint at 23-27 (authority both as UNE and access service); NEXTLINK at 1-4 (authority to order as tariffed interstate access service); Rhythms at 6 (both as UNE and access service); ALTS at 14 (both as UNE and access service).

collocation tariffs ordered pursuant to Sections 201 and 202 concurrently with implementation of collocation pursuant to Section 251(c)(6) of the Act, it is entirely proper for the Commission to order ILECs to file DSL line sharing tariffs pursuant to Sections 201 and 202 while also ordering unbundled access to DSL line sharing functionality and capability pursuant to Section 251(c)(3).[11]

To implement DSL line sharing as an interstate special access service successfully, the Commission need only take a few steps – all of which can be accomplished quickly in a manner that would spur the immediate availability of mass-market DSL services to millions of consumers. First, the Commission must ensure that federal collocation tariffs are revised to comply with the March 31 *Advanced Services Order* requirements and that ILEC interstate special access tariffs provide for DSL line sharing. Second, the Commission must clarify that CLECs have the ability to interconnect their networks constructed by means of unbundled network elements with the interstate line sharing access service.[12] Finally, the rate for the DSL line sharing interstate service must represent the incremental cost the DSL service imposes on the particular line and also provide for full imputation of those costs to the incumbent's retail DSL tariffs.

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11 Indeed, there are several such "services" that are available both as tariffed "access" services and as unbundled network elements. For instance, interoffice transport (DS1, DS3 and OCx bandwidths) can be purchased by CLECs both as an access service (either under federal or state tariffs) and as a UNE. The only real difference between interoffice access service and interoffice dedicated transport is price. Several of the original OSS elements (pre-order, order, maintenance and billing) for such dual access services/UNEs are essentially the same as the pre-Act ASR/access service systems.

12 Incumbent LECs have often (improperly) argued that CLECs cannot "combine" special access services with unbundled network elements. This issue is properly viewed as an interconnection issue, not a "UNE combination" issue.

ILECs Mis-State Technical Issues. The record clearly proves that DSL line sharing is technically feasible.[13] However, some ILECs do not seem to understand what DSL line sharing is. US West argues that "what CLECs seek is to purchase a *whole* unbundled loop, extend that loop into their collocation space on the incumbent's property, and attach their own, preferred xDSL electronics. A CLEC would then force the incumbent LEC to buy back whatever frequencies the CLEC chooses to let the incumbent use to provide voice telephony. In other words, the CLEC would buy and control the entire loop, but would use only part of it."[14]

This is dramatic, but not true. All CLECs seek from the ILEC is to lease or access the data portion of the spectrum that exists on twisted copper pairs. As proposed by Covad and other CLECs, the ILEC would retain control of the loop, and the analog signal on the voice frequencies need not ever enter Covad's collocation space.[15] Indeed, US West demonstrates an amazing lack of understanding basic transmission technology (or an equally amazing dedication to hyperbole) when it states that "[t]here is no inherent or generic high-frequency portion of the loop."[16] This is simply wrong – all copper loops, like all transmission media, have the capacity to carry multiple frequencies. DSLAMs and DSL CPE do not "create" new frequencies or capacity in the copper, they merely access and utilize frequencies on copper loops that *could* be used already but which are not normally used in analog, circuit-switched networks. US West

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13 *Further Notice* ¶ 103; ALTS at 6; Covad at 3-7; CIX Comments at 8; @link at 5-7; MCI at 12; Mitretek at 6; Oklahoma Corp. Comm. at 4, 15; Rhythms at 8; Primary Network Communications at 6; Nortel at 3, 9; NorthPoint at 19; GSA at 6; Inline at 2; Network Access Solutions at 6-7; California PUC at 5.

14 US West at i, 2. BellSouth makes a similar argument, stating that DSL line sharing involves the need for the ILEC to "hand over" its voice service to the CLEC into the CLEC collocation space. BellSouth at 18-19.

15 Covad Comments, Joshi Aff. at ¶¶ 3, 8.

shares its existing loops all the time for its Megabit DSL service – all Covad seeks is the same form of shared-line access.

The Operational Issues Raised by ILECs are Overstated. Operational issues can be resolved on a carrier-to-carrier basis. Indeed, DSL line sharing poses less operational issues than those created by sharing the loop for the provision of long distance and local services.[17]

Instead of offering solutions (as CLECs did), incumbent LEC comments invoked scare tactics and unabashed rhetoric about operational "issues" in this proceeding – raising claims of "customer confusion" because the customer will buy DSL service from one carrier (a CLEC) but acquire analog dial-up service from the ILEC. However, the record clearly reveals that ILECs that provide shared-line ADSL service to independent, third-party ISPs have already faced these installation, operation and maintenance issues.[18]

ILECs essentially prey upon the fear of the "unknown" as justification for their refusals to provide nondiscriminatory access. These "technical challenges" are nothing more than speculative and unsubstantiated "worst case" scenarios that must be viewed by the Commission with great skepticism. Interestingly, ILECs have not provided hard evidence of actual problems from shared-line DSL/analog-voice services – even though these ILECs are actively and aggressively marketing and selling shared-line DSL/analog-voice services today.

Line sharing supporters have stated that CLECs utilizing line sharing may be required to use xDSL flavors that are designed to work with the analog voice services and that such xDSL

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16 US West at 1.

17 MCI at 12 ("Concerns about technical and operational issues can be resolved by applying the billing, maintenance and customer service issues that are currently applied for other traditional local services.").

must be deployed in accordance with industry standards or standard deployment practices.[19] In short, the "harm to the network" arguments should not be heeded – just as the Commission need no longer concern itself with the "blasting effect" caused by the Hush-a-Phone.

Implementation Issues are No Reason to Permit Continued Discrimination. The Commission must remember that if it does not order access to DSL line sharing, it would permit ILECs to continue to provide DSL line sharing functionality to the ILEC's retail operations while *denying* that functionality to unaffiliated CLECs. Therefore, even if the Commission accepts the ILEC "operational" arguments against DSL line sharing at face value, these arguments still do not justify giving the ILEC exclusive and discriminatory access to this functionality.

Therefore, ILEC arguments that DSL line sharing presents substantial cost allocation issues,[20] would require working out customer service responsibilities,[21] may not be available on all lines for all types of DSL,[22] and may require revisions to current ILEC operations support systems ("OSS"),[23] cannot be examined in a vacuum. Those concerns must be balanced against the impact of *not* ordering DSL line sharing – the impact upon data CLECs, the impact upon residential broadband deployment, and the impact upon the efficient use of scarce resources.

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18 NAS at 7 (citing Bell Atlantic volume tariff, which assigns all customer support and maintenance issues to independent ISP reseller); ALTS at 6; Covad at 7-10; NorthPoint at 18; Rhythms at 8-9.

19 NorthPoint at 19; Rhythms at 8-10; Prism at 7; Covad at 3-10; Sprint at 9-10; Nortel at 9 (urging Commission to implement notion of "good engineering practices").

20 BellSouth at 16-17; Bell Atlantic Declaration of Robert Crandall at 4, 10-11.

21 USTA at 18-20, 23-24; BellSouth at 18; GTE at 29-30; Bell Atlantic Reply Declaration of Alfred Kahn at 10-13.

22 SBC at 25; US West at 10; Nextlink at 9-10; USTA at 26-27; Bell Atlantic Reply Declaration of Alfred Kahn at 10-13.

23 BellSouth at 21-22; Bell Atlantic Statement of Dr. Charles Jackson at 8-11.

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Ultimately, the Commission must ensure that the customer make the final decision regarding the services that the customer wishes to have provided to it over its loop.[24] The Commission can greatly promote the availability of broadband xDSL services to residential and small business by ordering ILECs to make DSL line sharing functionality available immediately.

II. SECTRUM MANAGEMENT: THE RECORD SUPPORTS OUTRIGHT REJECTION OF ILEC BINDER GROUP MANAGEMENT PROGRAMS

Covad argued that SBC's and similar binder group management programs discriminate against non-ADSL flavors of DSL, make no engineering sense, and comparatively disadvantage CLEC DSL deployment to ILEC deployment.

Other parties agreed with Covad's assessment that binder group management makes no engineering sense.[25] Indeed, many of these parties were SBC's fellow incumbent LECs. For example, Bell Atlantic said that, "it is unnecessary for incumbent carriers or the Commission to develop binder group administration practices that specify the type and numbers of acceptable technologies that can be deployed in any particular binder group."[26] Ameritech argued that "the practice of segregating services within binder groups based on technologies" (as SBC proposes to do) will "provide relatively few benefits compared to potential complications and under-utilization of available pairs that would result from this practice."[27] US West clearly states that

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24 ALTS at 10; Prism at 14.

25 *See, e.g.,*, Rhythms at 23-26 (DSL services are minimal network disturbers, if at all, and need not be segregated or specially managed by the ILECs to preserve network integrity.").

26 Bell Atlantic at 19-20.

27 Ameritech at 17-18. Interestingly, though, Ameritech argued that binder group segregation might be appropriate for ADSL "performance improvement." Given that

"segregation of xDSL technology is simply not feasible in most circumstances, as T1E1.4 has confirmed. . ."[28]

In the end, SBC stands alone on the issue of binder group management. The Commission's final spectrum management policy should incorporate Covad's proposal – a proposal that would neutrally approve particular technologies for deployment without segregating xDSL services into particular binder groups.

III. CONCLUSION

As described in Covad's opening comments and above, the Commission should: (1) immediately order ILECs to provide DSL line sharing; and (2) implement a nondiscriminatory and neutral spectrum management policy and process that would approve particular xDSL technologies for deployment in the local network – rather than adopt any variant of binder group management administered by the ILEC that would favor ADSL service over other flavors of xDSL.

Respectfully submitted,

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Dated: July 22, 1999

ILECs are more likely to deploy ADSL services (which do not cannibalize existing, high-margin business data services) than CLECs, deployment of a binder group management system for "performance improvement" of ADSL in reality masks a discriminatory policy in which ILEC ADSL will received favored treatment over CLEC SDSL, IDSL and RaDSL services.

28 U S West at 8.